

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Claim 1 (previously amended): A flat-panel wide-field-of-view projection display comprising a disc-shaped, circularly symmetric lens collimating light from points in a focal circumference around the disc, and an array of light emitters positioned along the focal circumference of the circularly symmetric lens so that light rays from each of the light emitters are substantially collimated by the lens in the plane of the lens in a different direction from its neighboring light emitters and pass through the lens as a beam; a light modulator for modulating the rays; and a ray-diverting means upon which the collimated light impinges and which ejects said light out of the plane of the lens and towards a viewer.

Claim 2 (original): A projection display according to claim 4, in which the ray-diverting means includes a rotating prismatic reflector (20) and the selecting means includes means for synchronizing the rotary position of the reflector with the modulation of the light.

Claim 3 (original): A projection display according to claim 1, in which the ray-diverting means comprises a flat panel of material.

Claim 4 (original): A projection display according to claim 3, further comprising line-selecting means associated with the panel for selecting one line at a time of an image from the array of light emitters so as to display that line.

Claim 5 (previously amended): A projection display according to claim 4, in which the ejection of the collimated light out of the plane is by deflection of the rays from the panel at the selected line.

Claim 6 (original): A projection display according to claim 5, in which the panel includes a reflective sheet (5) and the selecting means is a transducer (6) for

producing a localized, linear, acoustic or surface wave in the sheet, the presence of the wave at a given position causing reflection of the ray.

Claim 7 (original): A projection display according to claim 5, in which the panel is a waveguide (10) into which light from the lens is injected.

Claim 8 (original): A projection display according to claim 7, in which the ejection means (11) is a diffraction grating, which causes collimated light to travel in a particular direction.

Claim 9 (previously amended): A projection display according to claim 7 in which the line-selecting means comprises a layer of strip on the panel or at any other position in the collimated beam of light, which is switchably reflective or transparent; the means for selecting the position at which the rays are ejected being adapted to change the state of the switchable layer.

Claim 10 (previously amended): A projection display according to claim 1 in which each light emitter includes a microdisplay (4) acting as the light modulator.

Claim 11 (original): A projection display according to claim 10, in which each light emitter comprises a microdisplay and an individual lens (3), arranged so that the microdisplay emits light towards the individual lens; each individual lens being positioned on the focal circumference of the circularly symmetric lens (1).

Claim 12 (original): A projection display according to claim 11, in which each individual lens is cylindrical and separated from the microdisplay by its focal distance.

Claim 13 (previously amended): A projection display according to claim 10, in which neighboring microdisplays each project a complete one-dimensional image, the images differing only in the angle view or phase.

Claim 14 (previously amended): A projection display according to claim 10, in which a frame store is provided for each microdisplay to store successive images of a moving display.

Claim 15 (previously amended): A projection display according to claim 1, in which the light emitters are point sources, used to display a hologram, or abutting sources, used to display an auto-stereoscopic view.

Claim 16 (previously amended): A projection display according to claim 3, in which the light sources are unmodulated and the light modulator is in the form of a switchable strip provided in the path of the collimated rays, between the circularly symmetric lens and the panel, in order to modulate the collimated light.

Claim 17 (previously amended): A projection display according to claim 1, and further including a diffuser (8) positioned after the ray-diverting means in order to narrow the gaps between the beams from adjacent light emitters.

Claim 18 (previously amended): A projection display according to claim 3, further including a reflector (9), provided to at least one side of the panel (10) to reflect an outer portion of the image that misses the panel back towards the panel.

Claim 19 (original): A projection display according to claim 18, further including image-processing means adapted to ensure that the reflected pixels display the correct part of the image, taking into account the reflection.

Claim 20 (original): A projection display according to claim 3, arranged with the circularly symmetric lens (1) and panel (5; 10) in substantially the same plane, preferably the plane in which the light is emitted from the light emitters.

Claim 21 (original): A projection display according to claim 3, in which the planes in which the panel and lens are formed are adjacent and parallel, folding means being provided to fold the optical system so that rays emitted from the edge of the lens are directed into the panel.

Claim 22 (currently amended): A monocentric lens comprising a generally circular transparent disc defining two opposite faces joined by a circumferential edge and whose thickness varies with radius in such a way that light can be injected into, ~~and adapted to receive and collimate light rays entering at the~~ edge of the disc, at an angle slightly off the normal to the axis of the disc, and be totally internally reflected off the faces of the disc, emerging as a collimated beam from the said edge at locations remote from the point of entry.